

# **Notice of Allowability**

Application No.

10/658,155

Applicant(s)

KURAMOTO ET AL.

Examiner

Igor Kershteyn

Art Unit

3745

## **-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-18.
3. ☒ The drawings filed on 08 September 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### **Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>09/08/2003</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                 | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

***Reasons for allowance***

The following is an examiner's statement of reasons for allowance:

The instant invention is deemed to be directed to an unobvious improvement to a vacuum pump over U.S. Patent No. 5,618,167 which teaches a vacuum pump 1 comprising: a housing 17; a pump mechanism 4 accommodated in the housing 17; an exhaust-passage forming portion 16 located outside the housing 17, wherein the exhaust-passage forming portion 17 forms an exhaust passage, which exhaust passage guides gas discharged from the pump mechanism 4 toward the outside of the vacuum pump 1; and a thermal conductor 19 wherein the thermal conductor 19 is made a material having a thermal conductance that is greater than that of the material for the exhaust-passage forming portion 16.

Regarding claim 1, the improvement comprises the thermal conductor connected to an outer surface of the exhaust-passage forming portion.

Regarding claim 10, the improvement comprises a muffler connected to the flange, wherein the gas flows from the flange to the muffler; and the thermal conductor connected to an outer surface of the flange and the muffler.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Prior Art***

Prior art made of record but not relied upon is considered pertinent to Applicant's disclosure and consist of four patents.

Kropiwnicki et al. (4,549,857) is cited to show a vacuum pump having a housing, a pumping mechanism, an exhaust-passage forming portion, and a thermal conductor but fails to teach the exhaust-passage forming portion located outside the housing.

Lee (5,762,478) is cited to show a vacuum pump having a housing, a pumping mechanism, an exhaust-passage forming portion, and a thermal conductor but fails to teach the exhaust-passage forming portion located outside the housing.

Yamauchi (6,629,824) is cited to show a vacuum pump having a housing, a pumping mechanism, an exhaust-passage forming portion, and a thermal conductor but fails to teach the thermal conductor connected to an outside surface of the exhaust-passage forming portion.

Yamauchi (6,679,677) is cited to show a vacuum pump having a housing, a pumping mechanism, an exhaust-passage forming portion, and a thermal conductor but fails to teach the thermal conductor connected to an outside surface of the exhaust-passage forming portion.

***Contact information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kershteyn whose telephone number is (703) 308 8317. The examiner can be reached on Monday-Friday from 8:00 a.m. to 4:30 p.m.

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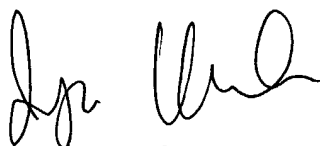
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on (703) 308 1044. The fax number is (703) 872-9306.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308 0861.

IK

November 18, 2004



**Igor Kershteyn**  
Patent examiner.  
Art Unit 3745



**F. DANIEL LOPEZ**  
PRIMARY EXAMINER